



PATENT Attorney Docket No. 056291-5231-US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| In re Application of: Andrew CASSIDY et al. |) |
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| Application No.: 10/568,432 |) Group Art Unit: Unassigned |
| Filed: February 14, 2006 |) Examiner: Unassigned |
| For: AMPLIFICATION METHOD |) Date: July 31, 2006 |

Commissioner for Patents
U.S. Patent and Trademark Office
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401 Dulany Street
Alexandria, VA 22314

Sir:

INFORMATION DISCLOSURE STATEMENT

UNDER 37 C.F.R. § 1.97(b)

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicants petition the Examiner to consider this Information Disclosure Statement and documents listed on the attached Form PTO-1449. To the best of the undersigned's knowledge, this Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits for the above-referenced Application. Accordingly, Applicants do not believe a fee is due for filing this Information Disclosure Statement.

With the exception of U.S. Patents, copies of the listed documents are attached. Applicants respectfully request that the Examiner initial and return the Form PTO-1449, indicating that the information has been considered and made of record herein.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If it should be determined that the listed documents constitute "prior art" under United States law,

Applicants reserve the right to present to the office the relevant facts and law regarding the appropriate

status of such document.

Applicants further reserve the right to take appropriate action to establish the patentability of the

disclosed invention over the listed documents, should one or more of the documents be applied against

the claims of the present application.

Except for issue fees payable under 37 C.F.R. §1.18, the Commissioner is hereby authorized by

this paper to charge any additional fees during the entire pendency of this application including fees due

under 37 C.F.R. §§1.16 and 1.17 which may be required, including any required extension of time fees, or

credit any overpayment to Deposit Account No. 50-0310. This paragraph is intended to be a

By:

CONSTRUCTIVE PETITION FOR EXTENSION OF TIME in accordance with 37 C.F.R.

§1.136(a)(3).

Respectfully Submitted,

Morgan Lewis & Bockius

Date:

July 31, 2006

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Application No. Attorney Docket No. 10/568,432 INFORMATION DISCLOSURE CITATION 056291-5231-US (Use several sheets if necessary) PAGE 1 of 3 Applicants: Andrew CASSIDY et al. JUL 3 1 2006 PTO Form 1449 Filing Date: February 14, 2006 Group Art Unit: Unassigned July 31, 2006 **U.S. PATENT DOCUMENTS** Sub-Class Filing Date Class Initial Document No. Date Name April 19, 1996 US 5,716,785 February 10, 1998 Van Gelder et al. 435 6 FOREIGN PATENT DOCUMENTS Class Sub-Class **Translation** Document No. Date Country October 4, 2001 WIPO 2. WO 01/73134 WO 99/25873 May 27, 1999 WIPO 3. OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.) Affymetrix GeneChip® Expression Analysis Technical Manual [http://www.affymetrix.com/] Affymetrix Technical Note GeneChip[®] Eukaryotic Small Sample Target Labeling Assay Version II [http://www.affymetrix.com/Download/manuals] Akowitz et al. "A novel cDNA/PCR strategy for efficient cloning of small amounts of undefined RNA" Gene 6. 81(2):295-306 (1989) Apte et al. "Anchor-ligated cDNA libraries: a technique for generating a cDNA library for the immediate cloning of the 5'ands of mRNAs" Biotechniques 15:890-893 (1993) Assersohn et al. "The feasibility of using fine needle aspiration from primary breast cancers for cDNA microarray analyses" Clin Cancer Res. 8(3):794-801 (2002) Barnes "PCR amplification of up to 35-kb DNA with high fidelity and high yield from lambda bacteriophage templates" Proc Natl Acad Sci USA 91(6):2216-2220 (1994) Baugh et al. "Quantitative analysis of mRNA amplification by in vitro transcription" Nucleic Acids Res. 29(5):E29 Belyavsky et al. "PCR-based cDNA library construction: general cDNA libraries at the level of a few cells" Nucleic 11. Acids Research 17(8):2919-2932 (1989) Brady et al. "Representative in vitro cDNA amplification from individual hemopoietic cells and colonies" Meth Mol Cell Biol 2:17-25 (1990) Chamberlin and Ryan in The Enzymes, ed. PD Boyer (Academic Press, New York.) 87-108 (1982) 13. Chenchik et al. "Generation and use of high-quality cDNA from small amounts of total RNA by SMART PCR" In Gene Cloning and Analysis by RT-PCR (BioTechniques Books, MA) 305–319 (1998) Cheng et al. "Temporal mapping of gene expression levels during the differentiation of individual primary 15. hematopoieticcells" Proc Natl Acad Sci USA 93(23):13158-13163 (1996) Chirgwin et al. "Isolation of biologically active ribonucleic acid from sources enriched in ribonuclease" Biochemistry 16. 18(24):5294-5299 (1979) Chomczynski and Sacchi "Single-step method of RNA isolation by acid guanidinium thiocyanate-phenol-chloroform extraction" Anal. Biochem. 162(1):156-159 (1987) Clark "Novel non-templated nucleotide addition reactions catalyzed by procaryotic and eucaryotic DNA polymerases" Nucleic Acids Res. 16(20):9677–9686 (1988) Dixon et al. "Expression profiling of single cells using 3 prime end amplification (TPEA) PCR" Nucleic Acids Res. 26(19):4426-4431 (1998) Domec et al. "cDNA library construction from small amounts of unfractionated RNA: association of cDNA synthesis 20. with polymerase chain reaction amplification" Anal Biochem. 188(2):422-426 (1990) Examiner Date Considered Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in

conformance and not considered. Include copy of this form with next communication to applicant.

| INFORMATION DISCLOSURE CITATION (Use several sheets if necessary) | | | Attorney Docket No. 056291-5231-US | | | Application No. 10/568,432 | | | |
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| | | OTHED DO | CUMENTS (Include | dina A | Author, Title, Date, Per | tinant Pa | mas atc.) | | |
| | 21. | | | | dulated RNAs by Subtra | | | a cDNA Library" Proc | |
| | | Natl Acad Sci USA. 85 | | | | | | | |
| | 22. | | | | Single Live Neurons" Pr | | | | |
| | 23. | | | | | | | | |
| | 24. | Frohman et al. "Rapid Production of Full-Length cDNAs from Rare Transcripts: Amplification Using a Single Gene- | | | | | | | |
| | 25. | Specific Oligonucleotide Primer" Proc Natl Acad Sci USA 85(23):8998-9002 (1988) Fromont-Racine et al. "A highly sensitive method for mapping the 5' termini of mRNAs" Nucleic Acids Res. | | | | | | | |
| | | 21(7):1683-1684 (1993 | 3) | | | | | | |
| | 26. | Gonzalez et al. "Identification and isolation of differentially expressed genes from very small tissue samples" Biotechniques 26(5):884-892 (1999) | | | | | | | |
| | 27. | | | | | | | | |
| | 28. | Hu and Temin "Retroviral recombination and reverse transcription" Science 250(4985):1227-1233 (1990) | | | | | | | |
| | 29. | | | | | | | | |
| | 30. | Huang et al. "A new hi | | | Γ-PCR system" Focus 22 | | | | |
| | 31. | | | | | | | | |
| | 32. | | | | | | | | |
| | 33. | Kellogg et al. "TaqStart Antibody: "hot start" PCR facilitated by a neutralizing monoclonal antibody directed against Taq DNA polymerase" Biotechniques 16(6):1134-1137 (1994) | | | | | | | |
| | 34. | | | | | les for hy | bridization o | on microarrays" | |
| | 25 | Klur et al. "Evaluation of procedures for amplification of small-size samples for hybridization on microarrays" Genomics 83(3):508-517 (2004) | | | | | | | |
| | 35. | Livesey et al. "Microarray Analysis of the Transcriptional Network Controlled by the Photoreceptor Homeobox Gene" Curr Biol. 10(6):301-310 (2000) | | | | | | | |
| | 36. | Luo et al. "Gene expression profiles of laser-captured adjacent neuronal subtypes" Nature Medicine 5:117-122 (1999) | | | | | | | |
| | 37. | Luzzi et al. "Expression Profiling of Ductal Carcinoma in Situ by Laser Capture Microdissection and High-Density Oligonucleotide Arrays" American Journal of Pathology 158:2005-2010 (2001) | | | | | | | |
| | 38. | Mahadevappa and Warrington "A high-density probe array sample preparation method using 10- to 100-fold fewer cells" Nat Biotechnol. 17(11):1134-1136 (1999) | | | | | | | |
| | 39. | | | | | | | | |
| | 40. | | | | | | | | |
| | | | | | | | | | |
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| PTO Form 1449 July 31, 2006 | | | Fili | Filing Date: February 14, 2006 | | | Group Art Unit: Unassigned | | | |
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| | | OTHER DO | CUMENTS (Includ | ding A | uthor, Title, Date, Per | tinent Pa | ges. etc.) | | | |
| | 41. | O'Brien et al. "RT-PCI | R assay for detection | of tran | scripts from very few c | ells using | whole cell ly | ysates" Biotechniques | | |
| | <u> </u> | 16(4):586-588, 590 (19 | | | | | | | | |
| | 42. | Ohyama et al. "Laser chybridization" Biotech | | | erated target sample for | nigh-den | sity oligonud | cleotide array | | |
| | 43. | | | | | Biotechn | iques 31(4): | 874-879 (2001) | | |
| | 44. | Pabon et al. "Optimized T7 amplification system for microarray analysis" Biotechniques 31(4):874-879 (2001) Phillips and Eberwine et al. "Antisense RNA Amplification: A Linear Amplification Method for Analyzing the mRNA | | | | | | | | |
| | 45 | Population from Single | Living Cells" Meth | ods 10 | (3):283-288 (1996) | 11 | b | alla" I Call Diogham | | |
| | 45. | 39(1):1-11 (1989) | method for studying | g mikin/ | A phenotypes in single | or small n | umbers of ce | ens J Cen Biochem. | | |
| | 46. | Rosenberg et al. "Vectors for selective expression of cloned DNAs by T7 RNA polymerase" Gene 56(1):125-135 (1987) | | | | | | | | |
| | 47. | Schmidt and Mueller "CapSelect: a highly sensitive method for 5' CAP-dependent enrichment of full-length cDNA in PCR-mediated analysis of mRNAs" Nucleic Acids Res. 27(21):e31 (1999) | | | | | | | | |
| | 48. | Shi and Kaminskyj "5' RACE by tailing a general template-switching oligonucleotide" Biotechniques 29(6):1192-1195 (2000) | | | | | | | | |
| | 49. | Sive and St John "A simple subtractive hybridization technique employing photoactivatable biotin and phenol | | | | | | | | |
| | 50. | | extraction" Nucleic Acids Res. 16(22):10937 (1988) SMART RACE cDNA Amplification Kit, CLONTECHniques XIV(1):4-6 (January 1999) | | | | | | | |
| | 51. | Spirin et al. "Analysis of Gene Expression in Human Bullous Keratopathy Corneas Containing Limiting Amounts of RNA" Investigative Ophthalmology and Visual Science 40:3108-3115 (1999) | | | | | | | | |
| | 52. | Theilgaard-Monch et al. "Profiling of gene expression in individual hematopoietic cells by global mRNA amplification and slot blot analysis" J Immunol Methods 252(1-2):175-189 (2001) | | | | | | | | |
| | 53. | Van Gelder et al. "Amplified RNA synthesized from limited quantities of heterogeneous cDNA" Proc Natl Acad Sci USA 87(5):1663-1667 (1990) | | | | | | | | |
| | 54. | Vernon et al. "Reproducibility of alternative probe synthesis approaches for gene expression profiling with arrays" J Mol Diagn. 2(3):124-127 (2000) | | | | | | | | |
| | 55. | Wang et al. "High-fidelity mRNA amplification for gene profiling" Nat Biotechnol. 18(4):457-459 (2000) | | | | | | | | |
| | 56. | Zhu et al. "Reverse transcriptase template switching: a SMART approach for full-length cDNA library construction" Biotechniques 30(4):892-897 (2001) | | | | | | | | |
| | 57. | Zhumabayeva et al. "Use of SMARTTM-generated cDNA for gene expression studies in multiple human tumors" Biotechniques 30(1):158-163 (2001) | | | | | | | | |
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